

REMARKS

This paper includes an Amendment to the claims which supplements the previously filed Preliminary Amendment which had been filed to remove multiple claim dependencies and to clarify claim language. In the instant Amendment, claims 1, 2 and 11 are being amended. The amendments to claim 1 cancel the embodiments concerning MHC II, and specify that the method of treating cancer is antitumoral immunotherapy and that the compound is administered in an amount sufficient for inducing cytotoxic T lymphocytes directed against tumor cells expressing MMP-2. For claim 2 the term “comprises” is replaced by the more limiting “consists of” and the function of the claimed immunogenic peptide has been added. Lastly, claim 11 has been amended to specify that MMP-2 protein and fragments of MMP-2 protein comprise a T epitope presented by MHC I. No new matter is believed to have been added.

### ARGUMENTS

The Examiner is requiring restriction to one of the following groups:

- Group I: Claims 1 and 14, insofar as the claims are drawn to a method treating cancer in a patient in need thereof comprising administering an effective amount of a MMP-2 metalloprotease to the patient;
- Group II: Claims 1, 6, 7, and 14-16, insofar as the claims are drawn to a method of treating cancer in a patient in need thereof comprising administering an effective amount of a fragment of a MMP-2 metalloprotease comprising a T epitope to the patient;
- Group III: Claims 1 and 14, insofar as the claims are drawn to a method of treating cancer in a patient in need thereof comprising administering an effective amount of a MHC I presented fragment of a MMP-2 metalloprotease comprising a T epitope to the patient;
- Group VI [sic] IV: Claims 1 and 14, insofar as the claims are drawn to a method of treating cancer in a patient in need thereof comprising administering an effective amount of a MHC II presented fragment of a MMP-2 metalloprotease comprising a T epitope to the patient;
- Group V: Claims 1 and 14, insofar as the claims are drawn to a method of treating cancer in a patient in need thereof comprising administering an effective amount of a polynucleotide encoding a MMP-2 metalloprotease to the patient;
- Group VI: Claims 1 and 14, insofar as the claims are drawn to a method of treating cancer in a patient in need thereof comprising administering an effective amount of a polynucleotide encoding a

fragment of a MMP-2 metalloprotease comprising a T epitope to the patient;

Group VII to  
Group LXVII:

Claims 1 and 14, insofar as the claims are drawn to a treating cancer in a patient by administering one specific combination of compounds to the patient, wherein the compounds are selected from the group consisting of: a MMP-2 metalloprotease; a fragment of a MMP-2 metalloprotease comprising a T epitope; a fragment of a MMP-2 metalloprotease comprising a T epitope presented by MHC I; a fragment of a MMP-2 metalloprotease comprising a T epitope presented by MHC II; a polynucleotide encoding a MMP-2 metalloprotease; a polynucleotide encoding a fragment of a MMP-2 metalloprotease comprising a T epitope;

Group LXVIII: Claims 2, 3, 5 and 13, drawn to a peptide that comprises a fragment of 8-11 consecutive amino acids of the MMP-2 metalloprotease and compositions comprising such a peptide and an adjuvant;

Group LXIX: Claims 4, 17 and 19, drawn to a polynucleotide that encodes a peptide that comprises a fragment of 8-11 consecutive amino acids of the MMP-2 metalloprotease and compositions comprising such a polynucleotide and an adjuvant;

Group LXX: Claims 8 and 18, drawn to isolated antigen-presenting cells expressing an MHC I molecule, wherein the isolated antigen-presenting cell is loaded, in vitro, with a peptide that comprises a fragment of 8-11 consecutive amino acids of the MMP-2 metalloprotease;

- Group LXXI: Claims 9 and 10, drawn to isolated antigen-presenting cells expressing an MHC I molecule, wherein the isolated antigen-presenting cell is transfected with a polynucleotide that encodes a peptide that comprises a fragment of 8-11 consecutive amino acids of the MMP-2 metalloprotease;
- Group LXXII: Claim 11, insofar as the claim is drawn to a method of preparing cytotoxic T lymphocytes directed against the MMP-2 metalloprotease, comprising selecting from cytotoxic T lymphocytes taken from a patient suffering from melanoma those cytotoxic T lymphocytes that recognize the MMP-2 protein and the multiplying, in vitro, the selected T lymphocytes thus selected;
- Group LXXIII: Claim 11, insofar as the claim is drawn to a method of preparing cytotoxic T lymphocytes directed against the MMP-2 metalloprotease, comprising selecting from cytotoxic T lymphocytes taken from a patient suffering from melanoma, those cytotoxic T lymphocytes that recognize a fragment of the MMP-2 protein and the multiplying, in vitro, the selected T lymphocytes thus selected;
- Group LXXIV: Claim 12, insofar as the claim is drawn to a preparation of cytotoxic T lymphocytes directed against the MMP-2 metalloprotease prepared by selecting from cytotoxic T lymphocytes taken from a patient suffering from melanoma, those cytotoxic T lymphocytes that recognize the MMP-2 protein and the multiplying, in vitro, the selected T lymphocytes thus selected; and

Group LXXV: Claim 12, insofar as the claim is drawn to a preparation of cytotoxic T lymphocytes directed against the MMP-2 metalloprotease prepared by selecting from cytotoxic T lymphocytes taken from a patient suffering from melanoma, those cytotoxic T lymphocytes that recognize a fragment of the MMP-2 protein and the multiplying, in vitro, the selected T lymphocytes thus selected.

Applicants provisionally elect Group LXVIII, Claims 2, 3, 5 and 13, drawn to a peptide that comprises a fragment of 8-11 consecutive amino acids of the MMP-2 metalloprotease and compositions comprising such a peptide and an adjuvant, with traverse on the grounds that no adequate reasons and/or examples have been provided to support a conclusion of patentable distinctiveness between the identified groups. Also, it has not been shown that a burden exists in searching the claims of the several groups.

Moreover, the MPEP at § 803 states as follows:

“If the search and examination of an entire application can be made without a serious burden, the Examiner must examine it on its merits, even though it includes claims to distinct or independent inventions.”

Applicants respectfully submit that a search of all of the claims would not impose a serious burden on the Office.

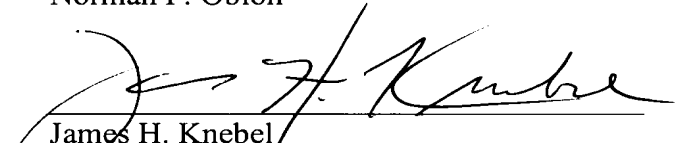
Finally, Applicants respectfully submit that, should the claims of Group LXVIII be found allowable, the Office should expand its search to the claims of the other fifteen or more groups.

Accordingly, and for the reasons presented above, Applicants submit that the Office has failed to meet the burden necessary in order to sustain the Restriction Requirement. Withdrawal of the Restriction Requirement is respectfully requested.

Applicants respectfully submit that the above-identified application is now in condition for examination on the merits, and early notice of such action is earnestly solicited.

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